X A NEW SPECIES OF TERMITAPHIS (HEMIPTERA-HETEROPTERA) FROM INDIA.

By F. SILVESTRI (Portici).

Dr. N. Annandale, Director of the Zoological Survey of India, has kindly sent me for examination a collection of Termites and Termitophils carefully made by himself on Barkuda Island in the Chilka Lake, Orissa. Among this material I have found several specimens of the interesting termitophil genus *Termitaphis* Wasm.

As these specimens are the first collected in India and as among them are young females and adult males, which until now were unknown, I wish, with Dr. Annandale's kind permission, to describe them in the present paper.

HEMIPTERA-HETEROPTERA.

Fam. TERMITOCORIDAE.

The family Termitocoridae was founded by me¹ in 1911 on the genus Termitaphis Wasm.² first referred to the Aphididae. The type of the genus is Termitaphis circumvallata Wasm. from Columbia. In 1911 (op. cit.) I described T mexicana from Mexico and T subafra from Principe I. (West Africa), Mjöberg ³ added the description of another species (T australiensis) from Australia.

The species now found in India by Dr. Annandale confirms the general distribution of *Termitaphis* in the tropics, in nests of Termites, especially of the genera *Leucotermes*, *Coptotermes*, *Schedorhinotermes*, *Hamitermes*.

The three species T circumvallata, T mexicana and T subatra were described from a single stage, it was thus not possible to know the different characters of adult females, adult males, and young. The material collected by Dr. Annandale has enabled me to give complete descriptions of the various stages.

Termitaphis annandalei sp. n.

(Figs. I-III).

♀ Corpus (Fig. I, 1) testaceo-isabellinum parte ventrali pallidiore, antennis pedibusque isabellinu; valde depressum, circumlitione ellipticum, fere 3/7 longius quam latius.

Boll. Lab. Zool. v, p. 232 (1911).

² Tijdschr. v. Entom. xlv, p. 105, pl. 9, figs. 7-7c (1902). ³ Entomologisk Tidskrift, p. 98. (1914).

Dorsum areolatum et tuberculis (Fig. II, 6-7) perparvis porigeris, denticulatis numerosis nec non poris sparsis instructum. Caput 4-lobatum lobis medianis quam laterales multo majoribus, lobulis marginalibus 8 instructis, lobis lateralibus lobulis tribus. Lobulorum setae clavatae, fere 2/3 longiores quam ad apicem latiores, pilosulae. Antennae articulo primo quam ultimus parum longiore, articulo secundo quam tertius aliquantum longiore, articulo ultimo aliquantum magis quam duplo longiore quam latiore. Rostrum ad mesosterni marginem anticum pertinens.

Thorax. Pronotum lateribus integris margine 10-lobulate, meso- et metanotum lateribus inter sese fusis incisione perparva vix distinctis, marginibus 6-7-lobulatis, metanoti medio dorso sulco secundario transversali, arcuato signato. Meso- et metasterni

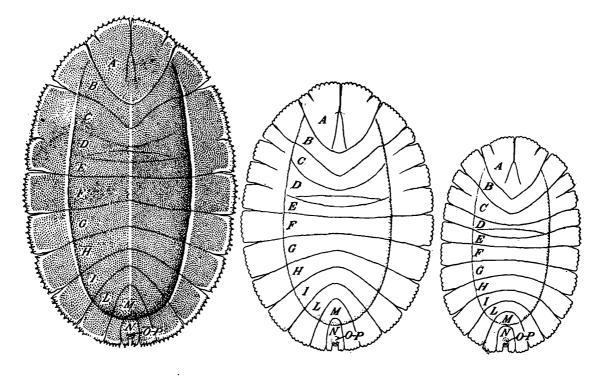


Fig. I.—Termitaphis annandalei: 1. femina adulta; 2. larva ultimae aetatis; 3. larva (?) secundae aetatis.

A caput, B prothorax, C mesothorax, D metathorax, E-P abdominis segmenta

superficies submediana setis brevioribus et brevibus nonnullis instructa est, carinarum superficies infera setis 3-4 praemarginalibus sat longis, et setis aliis brevibus et brevioribus aucta. Pedes forma et setis vide fig. II, 3-5, tibiis primi paris tantum setis apicalibus robustis et robustioribus instructis, tibiis secundi et tertii paris etiam spinis brevissimis robustis 2-3 armatis.

Abdomen. Segmentum primum lateribus partim a metanoti lateribus incisione parum profunda separatis. Segmenta 2-8 inter sese bene separata, segmenta nonum et decimum tubiformia obtecta. Marginum lobuli eisdem capitis et thoracis forma similes et segmenti primi 7-8, segmentorum 2-6 lobulis 8-10, segmenti septimi lobulis 5, segmenti octavi lobulis duobus. Segmentum octavum postice sat late et sat profunde incisum; segmenta nonum

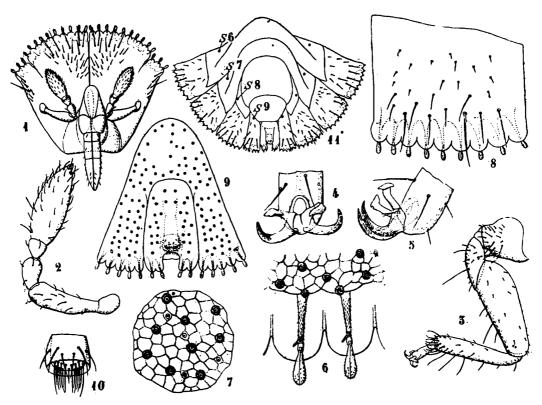


FIG. II.—Termitaphis annandalei: 1 caput pronum; 2. antenna; 3. pes paris tertii; 4. tarsi apex et praetarsus subtus inspecti; 5. idem lateraliter inspecti; 6. corporis particula marginalis cum lobulis duobus supra inspecta; 7. corporis superficiei particula submediana; 8. carina abdominis segmenti secundi supina; 9. feminae adultae segmenta abdominalia 7-10 prona; 10. feminae segmenta 9-10; 11. feminae abdominis segmenta 4-10 supina.

S6-S9 stigmata.

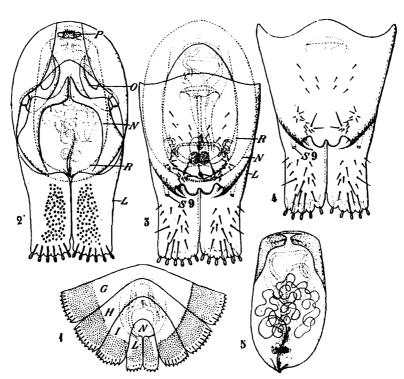


Fig. 111.—Termitaphis annandalei, mas: 1. abdominis segmenta 4-10 supina; 2. abdominis segmenta 7-10 prona; 3. eadem supina; 4. segmentum septimum separatum; 5. penis. G-P abdominis segmenta 4-10, R penis, S stigma segmenti septimi abdominalis.

et decimun (Fig. II, 10) parva tubiformia a segmenti octavo obtecta; segmentum decimum setis brevioribus numerosis instructum.

Long. corp. mm. 3.5, lat. 2.1; long. antennarum 0.65, pedum paris tertii 1.62.

o A femina forma abdominis segmentorum 8-10 (Fig. III, 1-4) valde diversus: segmentum septimum abdominis apicem posticum formans carinis inter sese tangentibus et antice segmentum 8-10 continens, segmentum octavum supra lateraliter in processus acutos duos introrsum et antrorsum vergentes productum; segmentum nonum etiam supra in processus duos arcuatos, acuti antrorsum vergentes productum; penis percrassus forma vide fig. III, 5.

Larva ultima (Fig. 1,2). Ab adulto differt mesonoti carina a metanoti carina profunde separata, quam metanoti carina singula aliquantum minore, et metanoti carinis duabus bene distinctis.

Long. corp. mm. 3, lat. 2.

Larva (?) secunda (Fig. 1,3). Carina mesonoti quam metanoti carina singula haud minor et similiter 4-lobulata.

Long. corp. mm. 2'2, lat. 1'3.

Habitat.—India: Ins. Barkuda (Chilka Lake) in nido Coptotermes Heimi Wasm., in trunco arboris (Ficus bengalensis) emortui et super solum sistentis exempla nonnulla Dr. N. Annandale legit. (12. x. 1920).